IN THE CLAIMS:

1-47. (Cancelled)

48. (Currently Amended) A method of manufacturing a medical device from a workpiece, comprising:

generating a beam of radiation from a radiation source; and

directing the radiation beam onto the workpiece by scanning the radiation beam with a scanning galvanometer to redirect the radiation beam in a desired manner within a planar scan area so that a prescribed pattern is cut in the workpiece, wherein a conical mirror is positioned along an optical path between the radiation source and the workpiece, the conical mirror having an apex with an aperture through which the workpiece passes.

49. (Currently Amended) The method of claim 48 wherein the radiation beam is scanned within ~~a~~ the planar scan area throughout which the beam is incident at a 90^{o} angle.

50. (Previously Presented) The method of claim 48 wherein the workpiece is a tubular workpiece.

51. (Previously Presented) The method of claim 50 wherein the planar scan area is perpendicular to a longitudinal axis of the tubular workpiece.

52. (Canceled)

53. (Currently Amended) The method of claim ~~52~~ 48 wherein the scanning galvanometer comprises a first pivotable scanning mirror pivotable about a first axis and a second pivotable scanning mirror pivotable about a second axis, wherein the first and second axes are orthogonal to one another.

54. (Previously Presented) The method of claim 48 further comprising the step of positioning at least one optical element along an optical path between the radiation source and the workpiece.

55. (Previously Presented) The method of claim 54 wherein the optical element comprises a flat field telecentric lens.

56. (Previously Presented) The method of claim 48 wherein the directing step includes the step of focusing the beam in a flat focal plane prior to impinging on the workpiece.

57. (Previously Presented) The method of claim 48 wherein the workpiece comprises a biocompatible material.

58. (Previously Presented) The method of claim 57 wherein said biocompatible material is stainless steel.

59. (Previously Presented) The method of claim 48 wherein the medical device is a stent.

60. (Previously Presented) The method of claim 48 wherein the medical device is a catheter.

61. (Previously Presented) The method of claim 48 wherein the workpiece is translated along its longitudinal axis during the step of directing the radiation beam.

62. (Previously Presented) The method of claim 50 wherein the tubular workpiece is rotated about its longitudinal axis during the step of directing the radiation beam.

63. (Previously Presented) The method of claim 48 wherein the radiation beam is a laser beam.

64. (Previously Presented) The method of claim 63 wherein the laser beam is a pulsed laser beam.

65. (Previously Presented) The method of claim 48 wherein the workpiece is cut by scanning the radiation over a common path a plurality of times, wherein each subsequent scan over the common path removes additional material from the workpiece.

66. (Currently Amended) A method of manufacturing a medical device from a tubular workpiece, comprising:

generating a beam of radiation from a stationary radiation source; and

directing the radiation beam onto the tubular workpiece by scanning the radiation beam so that a prescribed pattern is cut in the tubular workpiece; and

for at least a portion of time during which the radiation beam is being directed, redirecting the radiation beam generated by the stationary radiation source so that it is scanned about a circumference of the tubular workpiece while the tubular workpiece remains stationary ~~without rotation of the tubular workpiece~~.

67. (Previously Presented) The method of claim 66 wherein the radiation beam is scanned within a planar scan area throughout which the beam is incident at a 90^{o} angle.

68. (Previously Presented) The method of claim 67 wherein the planar scan area is perpendicular to a longitudinal axis of the tubular workpiece.

69. (Previously Presented) The method of claim 66 wherein the directing step includes the step scanning the radiation beam with a scanning galvanometer.